



Fig 1

Fig. 2

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1 / 1 31 / 11
ATG GAC ATA CAT CCC TAT AAA GAA TTT GGT TCA TCT TAT CAG TTG TTG AAT TTT CTT CCT
met asp ile asp pro tyr lys glu phe gly ser ser tyr gln leu leu asn phe leu pro
61 / 21 91 / 31
TTG GAC TTC TTT CCT GAC CTT AAT GCT TTG GTG GAC ACT GCT ACT GCC TTG TAT GAA GAA
leu asp phe phe pro asp leu asn ala leu val asp thr ala thr ala leu tyr glu glu
121 / 41 151 / 51
GAG CTA ACA GGT AGG GAA CAT TGC TCT CCG CAC CAT ACA GCT ATT AGA CAA GCT TTA GTA
glu leu thr gly arg glu his cys ser pro his his thr ala ile arg gln ala leu val
131 / 61 211 / 71
TGC TGG GAT GAA TTA ACT AAA TTG ATA GCT TGG ATG AGC TCT AAC ATA ACT TCT GAA CAA
cys trp asp glu leu thr lys leu ile ala trp met ser ser asn ile thr ser glu gln
241 / 81 271 / 91
GTA AGA ACA ATC ATA GTA AAT CAT GTC AAT GAT ACC TGG GGA CTT AAG GTG AGA CAA AGT
val arg thr thr ile ile val asn his val asn asp thr trp gly leu lys val arg gln ser
301 / 101 331 / 111
TTA TGG TTT CAT TTG TCA TGT CTC ACT TTC GGA CAA CAT ACA GTT CAA GAA TTT TTA GTA
leu trp phe his leu ser cys leu thr phe gly gln his thr val gln glu phe leu val
361 / 121 391 / 131
AGT TTT GTA GTA TGG ATC AGA ACT CCA GCT CCA TAT AGA CCT CCT AAT GCA CCC ATT CTC
ser phe val val trp ile arg thr pro ala pro tyr arg pro pro asn ala pro ile leu
421 / 141 451 / 151
TGG ACT CTT CCG GAA CAT ACA GTC ATT AGA AGA GGA GGT GCA AGA GCT TCT AGG TCC CCC
ser thr leu pro glu his thr val ile arg arg gly gly ala arg ala ser arg ser pro
481 / 161 511 / 171
AGA AGA CGC ACT CCC TCT CCT CCG AGG AGA AGA TCC CAA AAT TCG CAG TTC CAA ACT TGC
arg arg arg thr pro ser pro arg arg arg arg ser gln asn ser gln phe gln thr cys
541 / 181 571 / 191
AAA CAC TTG CCA ACC TCC TGT CCA CCA ACT TGC AAT GGC TTT CGT TGG ATG TAT CTG CCG
lys his leu pro thr ser cys pro pro thr cys asn gly phe arg trp met tyr leu arg
601 / 201 631 / 211
CGT TTT ATC ATA TAC CTA TTA GTC CTG CTG CTG TGC CTC ATC TTC TTG TTG GTT CTC CTG
arg phe ile ile tyr leu leu val leu leu leu cys leu ile phe leu leu val leu leu
661 / 221 691 / 231
GAC TGG AAA GGT TTA TTA CTT GTC TGT CCT CTT CAA CCC ACA ACA GAA ACA ACA GTC AAT
asp trp lys gly leu ile pro val cys pro leu gln pro thr thr glu thr thr val asn
721 / 241 751 / 251
TGC AGA CAA TGC ACA ATC TCT GCA CAA GAC ATG TAT ACT CCT CCT TAC TGT TGT TGT TTA
cys arg gln cys thr ile ser ala gln asp met tyr thr pro pro tyr cys cys cys leu
781 / 261 811 / 271
AAA CCT ACG GCA GGA AAT TGC ACT TGT TGG CCC ATC CCT TCA TCA TGG GCT TTA GGA AAT
lys pro thr ala gly asn cys thr cys trp pro ile pro ser ser trp ala leu gly asn
841 / 281 871 / 291
TAC CTA TGG GAG TGG GCC TTA GCT CGT CTC TCT TGG CTC AAT TTA CTA GTG CCC TTG CTT
tyr leu trp glu trp ala leu ala arg leu ser trp leu asn leu leu val pro leu leu
901 / 301 931 / 311
CAA TGG TTA GGA GGA ATT TCC CTC ATT GCG TGG TTT TTG CTT ATA TGG ATG ATT TGG TTT
gln trp leu gly gly ile ser leu ile ala trp phe leu leu ile trp met ile trp phe
961 / 321 991 / 331
TGG GGG CCC GCA CTT CTG AGC ATC TTA CCG CCA TTT ATT CCC ATA TTT GTT CTG TTT TTC
trp gly pro ala leu leu ser ile leu pro pro phe ile pro ile phe val leu phe phe
1021 / 341
TTG ATT TGG GTA TAC ATT TGA
leu ile trp val tyr ile OPA

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Fig. 3

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1 / 1 31 / 11
ATG GAC ATC GAC TCT TAT AAA GAA TTT GGA GCT ACT GTG GAG TTA CTC TCG TTT TTG CCT
met asp ile asp pro tyr lys glu phe gly ala thr val glu leu leu ser phe leu pro
61 / 21 91 / 11
TCT GAC TTC TTT CCT TCA GTA CGA GAT CTT CTA GAT ACC GCC TCA GCT CTG TAT CGG GAA
ser asp phe phe pro ser val arg asp leu leu asp thr ala ser ala leu tyr arg glu
121 / 41 151 / 51
GCC TTA GAG TCT CCT GAG CAT TGT TCA CCT CAC CAT ACT GCA CTC AGG CAA GCA ATT CTT
ala leu glu ser pro glu his cys ser pro his his thr ala leu arg gln ala ile leu
131 / 61 211 / 71
TGC TGG GGG GAA CTA ATG ACT CTA GCT ACC TGG GTG GGT GTT AAT TTG GAA GAT CCA GCG
cys trp gly glu leu met thr leu ala thr trp val gly val asn leu glu asp pro ala
241 / 81 271 / 91
TCT AGA GAC CTA CTA CTC AGT TAT GTC AAC ACT AAT ATG GGC CTA AAG TTC AGG CAA CTC
ser arg asp leu val val ser tyr val asn thr asn met gly leu lys phe arg gln leu
301 / 101 331 / 111
TTG TGG TTT CAC ATT TCT TGT CTC ACT TTT GGA AGA GAA ACA GTT ATA GAG TAT TTG GTG
leu trp phe his ile ser cys leu thr phe gly arg glu thr val ile glu tyr leu val
361 / 121 391 / 131
TCT TTC GGA GTG TGG ATT CGC ACT CCT CCA GCT TAT AGA CCA CCA AAT GCC CCT ATC CTA
ser phe gly val trp ile arg thr pro pro ala tyr arg pro pro asn ala pro ile leu
421 / 141 451 / 151
TCA ACA CTT CCG GAA CAT ACA GTC ATT AGA AGA GGA GGT GCA AGA GCT TCT AGG TCC CCC
ser thr leu pro glu his thr val ile arg arg gly gly ala arg ala ser arg ser pro
481 / 161 511 / 171
AGA AGA CGC ACT CCC TCT CCT CGC AGG AGA AGA TCC CAA AAT TCG CAG TCC CCA ACC TCC
arg arg arg thr pro ser pro arg arg arg arg ser gln asn ser gln ser pro thr ser
541 / 181 571 / 191
AAT CAC TCA GCA ACC TCT TGT CCT CCA ACT TGT CCT GGT TAT CGC TGG ATG TGT CTG CGG
asn his ser pro thr ser cys pro pro thr cys pro gly tyr arg trp met cys leu arg
601 / 201 631 / 211
CCT TTT ATC ATC TTC CTC TTC ATC CTC CTG CTA TGC CTC ATC TTC TTG TTG GTT CTT CTG
arg phe ile ile phe leu phe ile leu leu leu cys leu ile phe leu leu val leu leu
661 / 221 691 / 231
GAC TAT TAA GGT ATG TTG CCC GTT TGT CCT CTA ATT CCA GGA TCC TCA ACA ACC AGC ACG
asp tyr gln gly met leu pro val cys pro leu ile pro gly ser ser thr thr ser thr
721 / 241 751 / 251
GGA CCA TGC CGG ACC TGC ATG ACT ACT GCT CAA GGA ACC TCT ATG TAT CCC TCC TGT TGC
gly pro cys arg thr cys met thr thr ala gln gly thr ser met tyr pro ser cys cys
781 / 261 811 / 271
TGT ACC AAA CCT TCG GAC GGA AAT TGC ACC TGT ATT CCC ATC CCA TCA TCC TGG GCT TTC
cys thr lys pro ser asp gly asn cys thr cys ile pro ile pro ser ser trp ala phe
841 / 281 871 / 291
GGA AAA TTC CTA TGG GAG TGG GCC TCA GCC CGT TTC TCC TGG CTC AGT TTA CTA GTG CCA
gly lys phe leu trp glu trp ala ser ala arg phe ser trp leu ser leu leu val pro
901 / 301 931 / 311
TTT GTT CAG TGG TTC GTA GGG CTT TCC CCC ACT GTT TGG CTT TCA GTT ATA TGG ATG ATG
phe val gln trp phe val gly leu ser pro thr val trp leu ser val ile trp met met
961 / 321 991 / 331
TGG TAT TGG GCG CCA AGT CTG TAC AGC ATC TTG AGT CCC TTT TTA CCG CTG TTA CCA ATT
trp tyr trp gly pro ser leu tyr ser ile leu ser pro phe leu pro leu leu pro ile
1021 / 341
TTC TTT TGT CTT TGG GTA TAC ATT TAA
phe phe cys leu trp val tyr ile och

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Fig. 4

1 / 1 31 / 11
 ATG GAC ATC GAG CCT TAT AAA GAA TTT GGA GCT ACT GTC GAG TTA CTC TCG TTT TTG CCT
 met asp ile asp pro tyr lys glu phe gly ala thr val glu leu leu ser phe leu pro
 61 / 21 91 / 31
 TCT GAC TTC TTT CCT TCA GTA CGA GAT CTT CTA GAT ACC GCC TCA GCT CTG TAT CCG GAA
 ser asp phe phe pro ser val arg asp leu leu asp thr ala ser ala leu tyr arg glu
 121 / 41 151 / 51
 GCC TTA GAG TCT CCT GAG CAT TGT TCA CCT CAC CAT ACT GCA CTC AGG CAA GCA ATT CTT
 ala leu glu ser pro glu his cys ser pro his his thr ala leu arg gln ala ile leu
 181 / 61 211 / 71
 TGC TGG GGG GAA CTA ATG ACT CTA GCT ACC TGG GTG GGT GTT AAT TTG GAA GAT CCA GCG
 cys trp gly glu leu met thr leu ala thr trp val gly val asn leu glu asp pro ala
 241 / 81 271 / 91
 TCT AGA GAC CTA GTA GTC AGT TAT GTC AAC ACT AAT ATG GGC CTA AAG TTC AGG CAA CTC
 ser arg asp-leu val val ser tyr val asn thr asn met gly leu lys phe arg gln leu
 301 / 101 331 / 111
 TTG TGG TTT CAC ATT TCT TGT CTC ACT TTT GGA AGA GAA ACA GTT ATA GAG TAT TTG GTG
 leu trp phe his ile ser cys leu thr phe gly arg glu thr val ile glu tyr leu val
 361 / 121 391 / 131
 TCT TTC GGA GTG TGG ATT CGC ACT CCT CCA GCT TAT AGA CCA CCA AAT GCC CCT ATC CTA
 ser phe gly val trp ile arg thr pro pro ala tyr arg pro pro asn ala pro ile leu
 421 / 141 451 / 151
 TCA ACA CTT CCG GAG ACT ACT GTT GTT AGA CGA CGA GCG AGG TCC CCT AGA AGA AGA ACT
 ser thr leu pro glu thr thr val val arg arg arg gly arg ser pro arg arg arg thr
 481 / 161 511 / 171
 CCC TCG CCT CGC AGA CGA AGG TCT CAA TCG CCG CGT CGC AGA AGA TCT CAA TCT CGG CTA
 pro ser pro arg arg arg arg ser gln ser pro arg arg arg arg ser gln ser arg leu
 541 / 181 571 / 191
 GGA CCC CTT CTC GTG TTA CAG GCG GCG TTT TTC TTG TTA ACA AGA ATC CTC ACA ATA CCG
 gly pro leu leu val leu gln ala gly phe phe leu leu thr arg ile leu thr ile pro
 601 / 201 631 / 211
 CAG AGT CTA GAC TCG TGG TGG ACT TCT CTC AAT TTT CTA GCG GGA ACT ACC GTG TGT CTT
 gln ser leu asp ser trp trp thr ser leu asn phe leu gly gly thr thr val cys leu
 661 / 221 691 / 231
 GGC CAA AAT TCG CAG TCC CCA ACC TCC AAT CAC TCA CCA ACC TCT TGT CCT CCA ACT TGT
 gly gln asn ser gln ser pro thr ser asn his ser pro thr ser cys pro pro thr cys
 721 / 241 751 / 251
 GCT GGT TAT CCG TGG ATG TGT CTG CCG CGT TTT ATC ATC TTC CTC TTC ATC CTG CTG CTA
 pro gly tyr arg trp met cys leu arg arg phe ile ile phe leu phe ile leu leu leu
 781 / 261 811 / 271
 TGC CTC ATC TTC TTG TTG GTT CTT CTG GAC TAT CAA GGT ATG TTG CCC GTT TGT CCT CTA
 cys leu ile phe leu leu val leu leu asp tyr gln gly met leu pro val cys pro leu
 841 / 281 871 / 291
 ATT CCA GGA TCC TCA ACA ACC AGC ACG GGA CCA TCC CCG ACC TGC ATG ACT ACT GCT CAA
 ile pro gly ser ser thr thr ser thr gly pro cys arg thr cys met thr thr ala gln
 901 / 301 931 / 311
 GGA ACC TCT ATG TAT CCC TCC TGT TGC TGT ACC AAA CCT TCG GAC GGA AAT TGC ACC TGT
 gly thr ser met tyr pro ser cys cys cys thr lys pro ser asp gly asn cys thr cys
 961 / 321 991 / 331
 ATT CCC ATC CCA TCA TCC TGG GCT TTC GGA AAA TTC CTA TGG GAG TGG GCC TCA GCC CGT
 ile pro ile pro ser ser trp ala phe gly lys phe leu trp glu trp ala ser ala arg
 1021 / 341 1051 / 351
 TTC TCC TGG CTC AGT TTA CTA GTG CCA TTT GTT CAG TGG TTC GTA GGG CTT TCC CCC ACT
 phe ser trp leu ser leu leu val pro phe val gln trp phe val gly leu ser pro thr
 1081 / 361 1111 / 371
 GTT TGG CTT TCA GTT ATA TGG ATG ATG TGG TAT TGG GGG CCA AGT CTG TAC AGC ATC TTC
 val trp leu ser val ile trp met met trp tyr trp gly pro ser leu tyr ser ile leu
 1141 / 381 1171 / 391
 AGT CCC TTT TTA CCG CTG TTA CCA ATT TTC TTT TGT CTT TGG GTA TAC ATT TAA
 ser pro phe leu pro leu leu pro ile phe phe cys leu trp val tyr ile OCH

Fig. 5

1	/	1						31	/	11									
ATG	GAC	ATC	GAC=CCT	TAT	AAA	GAA	TTT	GGA	GCT	ACT	GTG	GAG	TTA	CTC	TCG	TTT	TTG	CCT	
met	asp	ile	asp	pro	tyr	lys	glu	phe	gly	ala	thr	val	glu	leu	leu	ser	phe	leu	pro
61	/	21							91	/	31								
TCT	GAC	TTT	TTT	CCT	TCA	GTA	CGA	GAT	CTT	CTA	GAT	ACC	GCC	TCA	GCT	CTG	TAT	CGG	GAA
ser	asp	phe	phe	pro	ser	val	arg	asp	leu	leu	asp	thr	ala	ser	ala	leu	tyr	arg	glu
121	/	41							151	/	51								
GCC	TTA	GAG	TCT	CCT	GAG	CAT	TGT	TCA	CCT	CAC	CAT	ACT	GCA	CTC	AGG	CAA	GCA	ATT	CTT
ala	leu	glu	ser	pro	glu	his	cys	ser	pro	his	his	thr	ala	leu	arg	gln	ala	ile	leu
181	/	61							211	/	71								
TGC	TGG	GGG	GAA	CTA	ATG	ACT	CTA	GCT	ACC	TGG	GTG	GGT	GTT	AAT	TTG	GAA	GAT	CCA	GCG
cys	trp	gly	glu	leu	met	thr	leu	ala	thr	trp	val	gly	val	asn	leu	glu	asp	pro	ala
241	/	81							271	/	91								
TCT	AGA	GAC	CTA	GTA	GTC	AGT	TAT	GTC	AAC	ACT	AAT	ATG	GCG	CTA	AAG	TTC	AGG	CAA	CTC
ser	arg	asp	leu	val	val	ser	tyr	val	asn	thr	asn	met	gly	leu	lys	phe	arg	gln	leu
301	/	101							331	/	111								
TTG	TGG	TTT	CAC	ATT	TCT	TGT	CTC	ACT	TTT	GGA	AGA	GAA	ACA	GTT	ATA	GAG	TAT	TTG	GTG
leu	trp	phe	his	ile	ser	cys	leu	thr	phe	gly	arg	glu	thr	val	ile	glu	tyr	leu	val
361	/	121							391	/	131								
TCT	TTC	GGA	GTG	TGG	ATT	CGC	ACT	CCT	CCA	GCT	TAT	AGA	CCA	CCA	AAT	GCC	CCT	ATC	CTA
ser	phe	gly	val	trp	ile	arg	thr	pro	pro	ala	tyr	arg	pro	pro	asn	ala	pro	ile	leu
421	/	141							451	/	151								
TCA	ACA	CTT	CCG	GAG	ACT	ACT	GTT	GTT	AGA	CGA	CGA	GCG	AGG	TCC	CCT	AGA	AGA	AGA	ACT
ser	thr	leu	pro	glu	thr	thr	val	val	arg	arg	arg	gly	arg	ser	pro	arg	arg	arg	thr
481	/	161							511	/	171								
CCC	TCG	CCT	CGC	AGA	CGA	AGG	TCT	CAA	TCG	CCG	CGT	CGC	AGA	AGA	TCG	ATC	CTC	AAC	AAC
pro	ser	pro	arg	arg	arg	arg	ser	gln	ser	pro	arg	arg	arg	arg	ser	ile	leu	asn	asn
541	/	181							571	/	191								
CAG	CAC	GGG	ACC	ATG	CCG	GAC	CTG	CAT	GAC	TAC	TGC	TCA	AGG	AAC	CTC	TAT	GTA	TCC	CTC
gln	his	gly	thr	met	pro	asp	leu	his	asp	tyr	cys	ser	arg	asn	leu	tyr	val	ser	leu
601	/	201							631	/	211								
GTG	TTG	CTG	TAC	CAA	ACC	TTT	GGA	CGG	AAA	TTG	CAC	CTG	TAT	TCC	CAT	CCC	ATC	ATC	CTG
leu	leu	leu	tyr	gln	thr	phe	gly	arg	lys	leu	his	leu	tyr	ser	his	pro	ile	ile	leu
661	/	221							691	/	231								
CGC	TTT	CCG	AAA	ATT	CCT	ATG	GGA	GTG	GGC	CTC	AGC	CCG	TTT	CTC	CTG	GCT	CAG	TTT	ACT
gly	phe	arg	lys	ile	pro	met	gly	val	gly	leu	ser	pro	phe	leu	leu	ala	gln	phe	thr
721	/	241							751	/	251								
ACT	GCC	ATT	TGT	TCA	GTG	GTT	CGT	AGG	GCT	TTC	CCC	CAC	TGT	TTG	GCT	TTC	AGT	TAT	ATG
ser	ala	ile	cys	ser	val	val	arg	arg	ala	phe	pro	his	cys	leu	ala	phe	ser	tyr	met
811	/	261							841	/	271								
GAT	GAT	GTG	GTA	TTG	GGG	GCC	AAG	TCT	GTA	CAG	CAT	CTT	GAG	TCC	CTT	TTT	ACC	GCT	GTT
asp	asp	val	val	leu	gly	ala	lys	ser	val	gln	his	leu	glu	ser	leu	phe	thr	ala	val
881	/	281							911	/	291								
ACC	AAT	TTT	CTT	TTG	TCT	TTG	GGT	ATA	CAT	TTA									
thr	asn	phe	leu	leu	ser	leu	gly	ile	his	leu									

Fig. 6

1 / 1 11 / 11
 ATG GAT ATC AAT GCT TCT AGA GCC TTA GCC AAT GTG TAT GAT CTA CCA GAT GAT TTC TTT
 met asp ile asn ala ser arg ala leu ala asn val tyr asp leu pro asp asp phe phe
 61 / 21 91 / 31
 CCA AAA ATA GAT GAT CTT GTT AGA GAT GCT AAA GAC GCT TTA GAG CCT TAT TGG AAA TCA
 pro lys ile asp asp leu val arg asp ala lys asp ala leu glu pro tyr trp lys ser
 121 / 41 151 / 51
 GAT TCA ATA AAG AAA CAT GTT TTG ATT GCA ACT CAC TTT GTG GAT CTT ATT GAA GAC TTC
 asp ser ile lys lys his val leu ile ala thr his phe val asp leu ile glu asp phe
 181 / 61 211 / 71
 TGG CAG ACT ACA CAG GGC ATG CAT GAA ATA GCC GAA TCA TTA AGA GCT GTT ATA CCT CCC
 trp gln thr thr gln gly met his glu ile ala glu ser leu arg ala val ile pro pro
 241 / 81 271 / 91
 ACT ACT ACT CCT GTT CCA CCG GGT TAT CTT ATT CAG CAC GAA GAA GCT GAA GAG ATA CCT
 thr thr thr pro val pro pro gly tyr leu ile gln his glu glu ala glu glu ile pro
 301 / 101 331 / 111
 TTG GGA GAT TTA TTT AAA CAC CAA GAA GAA AGG ATA GTG AGT TTC CAA CCC GAC TAT CCG
 leu gly asp leu phe lys his gln glu glu arg ile val ser phe gln pro asp tyr pro
 361 / 121 391 / 131
 ATT ACG GCT AGA ATT CAT GCT CAT TTG AAA GCT TAT GCA AAA ATT AAC GAG GAA TCA CTG
 ile thr ala arg ile his ala his leu lys ala tyr ala lys ile asn glu glu ser leu
 421 / 141 451 / 151
 GAT AGG GCT AGG AGA TTG CTT TGG TGG CAT TAC AAC TGT TTA CTG TGG GGA GAA GCT CAA
 asp arg ala arg arg leu leu trp trp his tyr asn cys leu leu trp gly glu ala gln
 481 / 161 511 / 171
 GTT ACT AAC TAT ATT TCT CGC TTG CGT ACT TGG TTG TCA ACT CCT GAG AAA TAT AGA CGT
 val thr asn tyr ile ser arg leu arg thr trp leu ser thr pro glu lys tyr arg gly
 541 / 181 571 / 191
 AGA GAT GCC-CCG ACC ATT GAA GCA ATC ACT AGA CCA ATC CAG GTG GCT CAG GGA GGC CGA
 arg asp ala pro thr ile glu ala ile thr arg pro ile gln val ala gln gly gly arg
 601 / 201 631 / 211
 AAA ACA ACT ACG GGT ACT AGA AAA CCT CGT GGA CTC GAA CCT AGA AGA AGA AAA GTT AAA
 lys thr thr thr gly thr arg lys pro arg gly leu glu pro arg arg arg lys val lys
 661 / 221 691 / 231
 ACC ACA GTT GTC TAT TGG AGA AGA CGT TCA AAG TCC CGG GCA AGG AGA GCC CCT ACA CCC
 thr thr val val tyr gly arg arg arg ser lys ser arg gly arg arg ala pro thr pro
 721 / 241 751 / 251
 CAA CGT GCG GGC TCC CCT CTC CCA CGT AGT TCG AGC AGC CAC CAT AGA TCC TTC GCG GGA
 gln arg ala gly ser pro leu pro arg ser ser ser ser his his arg ser phe gly gly
 781 / 261 811 / 271
 ATA CTA GCT GGC CTA ATC GGA TTA CTG GTA AGC TTT TTC TTG TTG ATA AAA ATT CTA GAA
 ile leu ala gly leu ile gly leu leu val ser phe phe leu leu ile lys ile leu glu
 841 / 281 871 / 291
 ATA CTG AGG AGG CTA GAT TGG TGG TGG ATT TCT CTC AGT TCT CCA AAG GGA AAA ATG CAA
 ile leu arg arg leu asp trp trp trp ile ser leu ser ser pro lys gly lys met gln
 901 / 301 931 / 311
 TGC GCT TTC CAA GAT ACT GGA GCC CAA ATC TCT CCA CAT TAC GTC GGA TCT TGC CCG TGG
 cys ala phe gln asp thr gly ala gln ile ser pro his tyr val gly ser cys pro trp
 961 / 321 991 / 331
 GGA TGC CCA GGA TTT CTT TGG ACC TAT CTC AGG CTT TTT ATC ATC TTC CTC TTA ATC CTG
 gly cys pro gly phe leu trp thr tyr leu arg leu phe ile ile phe leu leu ile leu
 1021 / 341 1051 / 351
 CTA GTA GCA GCA GGC TTG CTG TAT CTG ACG GAC AAC GGG TCT ACT ATT TTA GGA AAG CTC
 leu val ala ala gly leu leu tyr leu thr asp asn gly ser thr ile leu gly lys leu
 1081 / 361 1111 / 371
 CAA TGG GCG TCG GTC TCA GCC CTT TTC TCC TCC ATC TCT TCA CTA CTG CCC TCG GAT CCG
 gln trp ala ser val ser ala leu phe ser ser ile ser ser leu leu pro ser asp pro
 1141 / 381 1171 / 391
 AAA TCT CTC GTC GCT TTA ACG TTT GGA CTT TCA CTT ATA TGG ATG ACT TCC TCC TCT GCC
 lys ser leu val ala leu thr phe gly leu ser leu ile trp met thr ser ser ser ala
 1201 / 401 1231 / 411
 ACC CAA ACG CTC GTC ACC TTA ACG CAA TTA GCC ACG CTG TCT GCT CTT TTT TAC AAG AGC
 thr gln thr leu val thr leu thr gln leu ala thr leu ser ala leu phe tyr lys ser
 1261 / 421
 TAG

Year	Age	Sex	Occupation	Education	Income	Health	Life expectancy	Life expectancy at birth	Life expectancy at age 65	Life expectancy at age 85	Life expectancy at age 95	Life expectancy at age 99
1990	15	M	Student	High school	\$10,000	Good	75.0	75.0	75.0	75.0	75.0	75.0
1990	15	F	Student	High school	\$10,000	Good	78.0	78.0	78.0	78.0	78.0	78.0
1990	15	M	Student	College	\$15,000	Good	76.0	76.0	76.0	76.0	76.0	76.0
1990	15	F	Student	College	\$15,000	Good	79.0	79.0	79.0	79.0	79.0	79.0
1990	15	M	Student	Graduate	\$20,000	Good	77.0	77.0	77.0	77.0	77.0	77.0
1990	15	F	Student	Graduate	\$20,000	Good	80.0	80.0	80.0	80.0	80.0	80.0
1990	15	M	Student	High school	\$10,000	Fair	74.0	74.0	74.0	74.0	74.0	74.0
1990	15	F	Student	High school	\$10,000	Fair	77.0	77.0	77.0	77.0	77.0	77.0
1990	15	M	Student	College	\$15,000	Fair	75.0	75.0	75.0	75.0	75.0	75.0
1990	15	F	Student	College	\$15,000	Fair	78.0	78.0	78.0	78.0	78.0	78.0
1990	15	M	Student	Graduate	\$20,000	Fair	76.0	76.0	76.0	76.0	76.0	76.0
1990	15	F	Student	Graduate	\$20,000	Fair	79.0	79.0	79.0	79.0	79.0	79.0
1990	15	M	Student	High school	\$10,000	Poor	73.0	73.0	73.0	73.0	73.0	73.0
1990	15	F	Student	High school	\$10,000	Poor	76.0	76.0	76.0	76.0	76.0	76.0
1990	15	M	Student	College	\$15,000	Poor	74.0	74.0	74.0	74.0	74.0	74.0
1990	15	F	Student	College	\$15,000	Poor	77.0	77.0	77.0	77.0	77.0	77.0
1990	15	M	Student	Graduate	\$20,000	Poor	75.0	75.0	75.0	75.0	75.0	75.0
1990	15	F	Student	Graduate	\$20,000	Poor	78.0	78.0	78.0	78.0	78.0	78.0
1990	15	M	Student	High school	\$10,000	Very poor	72.0	72.0	72.0	72.0	72.0	72.0
1990	15	F	Student	High school	\$10,000	Very poor	75.0	75.0	75.0	75.0	75.0	75.0
1990	15	M	Student	College	\$15,000	Very poor	73.0	73.0	73.0	73.0	73.0	73.0
1990	15	F	Student	College	\$15,000	Very poor	76.0	76.0	76.0	76.0	76.0	76.0
1990	15	M	Student	Graduate	\$20,000	Very poor	74.0	74.0	74.0	74.0	74.0	74.0
1990	15	F	Student	Graduate	\$20,000	Very poor	77.0	77.0	77.0	77.0	77.0	77.0
1990	15	M	Student	High school	\$10,000	Excellent	76.0	76.0	76.0	76.0	76.0	76.0
1990	15	F	Student	High school	\$10,000	Excellent	79.0	79.0	79.0	79.0	79.0	79.0
1990	15	M	Student	College	\$15,000	Excellent	77.0	77.0	77.0	77.0	77.0	77.0
1990	15	F	Student	College	\$15,000	Excellent	80.0	80.0	80.0	80.0	80.0	80.0
1990	15	M	Student	Graduate	\$20,000	Excellent	78.0	78.0	78.0	78.0	78.0	78.0
1990	15	F	Student	Graduate	\$20,000	Excellent	81.0	81.0	81.0	81.0	81.0	81.0
1990	15	M	Student	High school	\$10,000	Good	75.0	75.0	75.0	75.0	75.0	75.0
1990	15	F	Student	High school	\$10,000	Good	78.0	78.0				

[illegible]

Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	18	65	32	28	38	35	0.15	2.1	0.98	Normal
Gender	1.2	0.4	1	2	1	1	1	1	0.05	0.2	0.95	Normal
Marital Status	2.1	0.8	1	3	2	1	3	2	0.12	1.8	0.97	Normal
Education	15.8	2.1	10	20	16	15	17	16	0.08	0.5	0.99	Normal
Income	1250	350	500	2500	1100	800	1400	1000	0.25	3.5	0.96	Normal
Occupation	1.8	0.6	1	3	2	1	3	2	0.03	0.1	0.99	Normal
Health Status	2.5	0.7	1	3	2	1	3	2	0.18	2.3	0.97	Normal
Stress Level	3.2	1.1	1	5	3	2	4	3	0.22	3.8	0.95	Normal
Life Satisfaction	4.1	0.9	3	5	4	3	5	4	0.01	0.0	0.99	Normal
Resilience	3.8	1.0	2	5	3	2	4	3	0.10	1.5	0.98	Normal
Optimism	4.3	0.8	3	5	4	3	5	4	0.02	0.1	0.99	Normal
Gratitude	4.5	0.7	3	5	4	3	5	4	0.01	0.0	0.99	Normal
Self-Esteem	4.2	0.9	3	5	4	3	5	4	0.03	0.2	0.99	Normal
Emotional Stability	4.0	0.8	3	5	4	3	5	4	0.02	0.1	0.99	Normal
Life Satisfaction (Control)	4.1	0.9	3	5	4	3	5	4	0.01	0.0	0.99	Normal
Resilience (Control)	3.8	1.0	2	5	3	2	4	3	0.10	1.5	0.98	Normal
Optimism (Control)	4.3	0.8	3	5	4	3	5	4	0.02	0.1	0.99	Normal
Gratitude (Control)	4.5	0.7	3	5	4	3	5	4	0.01	0.0	0.99	Normal
Self-Esteem (Control)	4.2	0.9	3	5	4	3	5	4	0.03	0.2	0.99	Normal
Emotional Stability (Control)	4.0	0.8	3	5	4	3	5	4	0.02	0.1	0.99	Normal

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